

Amendments to the Specification:

Please replace the paragraph beginning at page 8, line 18 as with the following amended paragraph:

As the component (a) suitable silane compounds used in the present invention include a silane precursor comprising silicon, oxygen, carbon and hydrogen, and an organic polysilicate prepolymer prepared ~~there from~~ therefrom. It is preferably selected from the group consisting of a compound represented by the following Chemical Formula 1, Chemical Formula 2, and a mixture thereof, or an organic silicate prepolymer prepared therefrom. In the Formula 1, each R¹ and R² is independently hydrogen, alkyl such as methyl, ethyl, propyl, butyl, or others, fluorine-containing alkyl group such as trifluoromethyl, trifluoropropyl or others, alkenyl such as vinyl, allyl, or others, or aryl such as phenyl. Those alkyl groups may be linear or branched. X is independently hydrolysable group, halide such as chlorine, alkoxy such as methoxy, ethoxy or propoxy, acyloxy such as acetoxy, or others. Although there is no particular limitation with respect to the functional group R¹, R² and X, it is more preferred that R¹ and R² are independently hydrogen, alkyl or phenyl and X is an alkoxy group. Some examples of the component (a-1) organosilane include tetraalkoxysilane, monoalkyltrialkoxysilane, dialkyldialkoxysilane, trialkylmonoalkoxysilane, trialkoxysilane, monoalkyldialkoxysilane, a mixture thereof etc. The partially hydrolyzed product of the organosilane precursor can be obtained by allowing a monomer or an oligomer to react in an organic solvent after addition of water and a catalyst at a temperature not higher than the boiling point of the organic solvent for a state time. In the Formula 2, each of R³ and R⁴ is independently hydrogen, alkyl such as methyl, ethyl, propyl, butyl, or others, fluorine-containing alkyl group such as trifluoromethyl, trifluoropropyl or others, alkenyl such as vinyl or allyl, or aryl such as phenyl, Y and Z are independently hydrolysable group, halide such as chlorine, alkoxy such as methoxy, ethoxy or propoxy, acyloxy such as acetoxy, or others. When R³ and/or R⁴ are alkenyl, it may be further bridged by a method of hydrosilylation reaction described below. Organic bridged unit, M may be alkylene or phenylene, preferably methylene, ethylene, propylene, phenylene, or a mixture thereof.

Please replace the paragraph beginning at page 11, line 7 as with the following amended paragraph:

As the component (b) a pore-forming material used in the present invention is radiation decomposable or preferably thermally decomposable. The radiation decomposable small molecules decompose upon exposure to radiation; e.g. ultraviolet, x-ray, electron beam or the like. The thermally decomposable small molecules used as a pore-forming material ~~having~~ have at least one silyl functional group at the end, so that a pore-forming material can be connected by a covalent bonding with the component (a). The pore-forming material component (b) may be mixed with partially hydrolyzed condensate prepared from the component (a), or it can be added when preparing a partially hydrolyzed condensate of the component (a). The pore-forming material is an organic molecules with a silyl group, preferably at the end. The organic part of the pore-forming material can be any organic aliphatic and/or aromatic hydrocarbon containing organic linkage groups that can be decomposed at 200~500 °C, such as ether containing organic molecule, ester containing organic molecules, amide containing organic molecules, carbonate group containing organic molecules, carbamate group containing organic molecules, anhydride group containing organic molecules, amine group containing organic molecules, enamine group containing organic molecules, imine group containing molecules, azo group containing organic molecules, thio-ether group containing organic molecules, sulfone group containing organic molecules, sulfoxide group containing organic molecules, isocyanate group containing organic molecules, isocyanurate group containing organic molecules, triazine group containing organic molecules, acid group containing organic molecules, epoxy group containing organic molecules, and the like. Organic linkage groups may exist in linear chain and/or cyclic structure. The organic part of the component (b) may contain one functional linkage group or in combination of two or more thereof. The sillane part of the component (b) has at least one functional group to react with the component (a). The preferred functional groups are alkoxy (methoxy, ethoxy, propoxy etc), acyloxy (such as acetoxy), hydroxyl, or halide (such as chlorine).